

REMARKS

Claims 1-17 and 19-20 were pending before the submission of this amendment. Claims 1-17 and 19-20 are rejected. Claims 1, 9, 11, 13-17 and 19-20 are amended to further clarify the inventive subject matter recited therein. No new matter has been added. Claims 1-17, and 19-20 are now currently pending. All of the claims remaining in the application are now believed allowable for the reasons stated below.

Rejections under 35 U.S.C. § 102(b)

Claims 9-10 and 13-15 are rejected under 35 U.S.C. § 102(b) as being unpatentable over Shanley, II et al., U.S. Pat. No. 4,295,166 (hereinafter *Shanley*). Claims 9 and 13-15 have been amended. Claim 10 depends from amended Claim 9.

A. Detection Of The Color Channel With The Minimum Signal Level

Amended Claim 9 recites “a minimum signal detector for outputting...a signal level of a color channel reference signal having the lowest signal level from among a plurality of color channel reference signals.” In addition to the signal detector, Claim 9 further recites “a comparator that compares said minimum signal level with a fixed voltage reference signal.” In contrast, *Shanley* teaches a circuit that has only a comparator. That is, rather than using a detector to first determine which of a plurality of color channel reference signals has the lowest signal level, and using a comparator to comparing the color channel with the lowest signal level to a reference signal, *Shanley* teaches only using a comparator to compare a reference to each color channel directly (*see e.g., Shanley* at Figure 1). For example, comparator 55 is connected directly to the blue color channel (*see e.g., Shanley* at Figure 1). There is no intermediate detector to first determine which color channel has the lowest signal level before the comparator 55 compares the signal level to the reference (*see e.g., Shanley* at Figure 1). As such, comparator 55 is arranged only to directly compare a reference signal level to the blue color channel signal level (*see e.g., Shanley* at Figure 1). Nowhere does *Shanley* teach a minimum signal detector that outputs the signal level of the color channel reference signal having the lowest signal level as is described in amended Claim 9.

B. Receiving Multiple Color Channels as Input

Amended Claim 9 further recites “a minimum signal detector that receives a plurality of color channel reference signals as input.” In contrast, *Shanley* teaches a comparator that receives a single color channel signal as input, rather than each of the red, green and blue color channel signals (*see e.g., Shanley* at Figure 1). For example, Comparator 55 receives only the blue color channel as input (*see e.g., Shanley* at Figure 1). Thus, *Shanley* does not teach a minimum signal detector that receives a plurality of color channel reference signals as input as is recited in amended Claim 9. As such, none of the cited references, singly or in combination, disclose, teach or suggest all of the limitations of Applicant’s Claim 9. Therefore, amended Claim 9 is believed to be allowable and notice to that affect is respectfully requested.

C. Other Claims

Claim 10 depends from and further limits amended Claim 9. Claim 10 is therefore allowable for at least the same reasons as that of Claim 9 as well as any additional limitations it recites.

Claims 13-15 have been amended in a manner consistent with amended Claim 9. As such, none of the cited references, singly or in combination, disclose, teach or suggest all of the limitations of amended Claims 13-15. Therefore, amended Claims 13-15 are believed to be allowable and notice to that affect is respectfully requested.

Rejection under 35 U.S.C. § 103(a)

Claims 1, 8, 11-12, 16-17 and 19-20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Sano et. al., U.S. Pat. No. 5,400,086 (hereinafter *Sano*) in view of *Shanley*. Claims 1, 11, 16-17 and 19-20 have been amended. Claims 8 and 12 depend from amended Claims 1 and 11, claim 15 now depends from claim 14, claim 16 depends from claim 15, claim 17 depends from claim 16, claim 19 now depends from claim 13, and claim 20 now depends from claim 19.

Claim 1 has been amended in a manner consistent with amended Claim 9. As such, none of the cited references, singly or in combination, disclose, teach or suggest all of the

limitations of amended Claim 1. Therefore, amended Claim 1 is believed to be allowable and notice to that affect is respectfully requested.

Claim 8 depends from amended Claim 1. Claim 8 is therefore allowable for at least the same reasons as that of Claim 1 as well as any additional limitations it recites. For example, Claim 8 recites "an adder circuit coupled in the signal path...wherein a feedback signal...is coupled as input to the adder circuit." Claim 8 further recites that the feedback signal is "generated according to the color channel video signal and [a] color channel reference signal." Base Claim 1 recites "a control circuit and clamping circuit for generating [the] color channel reference signal and controlling a color channel video signal for each color channel."

In contrast, *Sano* does not teach such a feedback signal generated based upon two individually generated signals. For example, the feedback signal of *Sano* is the output from sample and hold circuits 60R, 60B and 60G which is generated by comparators 59R, 59G and 59B according to a color signals (output from adders 58R, 58G and 58B) and a brightness control signal (*see, e.g., Sano* at Figure 21). In other words, the feedback signal is generated according to a color signal and a brightness control signal. This brightness control signal, however, is a single signal that is generated and used by all channels commonly (*see, e.g., Sano* at Figure 21) rather than an individual color reference signal separately generated for each color channel as is described in applicant's Claim 1. As such, none of the cited references, singly or in combination, disclose, teach or suggest all of the limitations of Applicant's Claim 8. Therefore, dependant Claim 8 is believed to be allowable and notice to that affect is respectfully requested.

Claim 11 has been amended in a manner consistent with amended Claim 9. As such, none of the cited references, singly or in combination, disclose, teach or suggest all of the limitations of amended Claim 11. In addition, Claim 11 recites "a second adder in the path of the color channel reference signal, which said brightness feedback signal is coupled." Claim 11 further recites that the "brightness feedback signal [is] based on a detection of a signal level of a color channel reference signal having the lowest signal level among the plurality of adjusted color channel reference signals." As the Office Action states that "*Sano et al* explicitly does not disclose the brightness feedback signal," *Sano* therefore also does not disclose the second adder recited in applicant's Claim 11 that is arranged to receive the brightness feedback signal as input.

Further, *Shanley* does not cure the deficiencies of *Sano* because *Shanley* also discloses no such adder. Although *Shanley* discloses no adder, the Office Action asserts that *Shanley* does teach such a feedback signal (*see, e.g.*, Office Action at page 6 lines 13-15). Though, as described bellow, *Shanley* does not teach such a feedback signal, even if *Shanley* did teach such a feedback signal, *Shanley* does not teach inputting the feedback signal to an adder in the path of the color channel reference signal as is recited in Applicant's Claim 11. In contrast, *Shanley* teaches away from such a use as *Shanley* expressly teaches providing the feedback signal direction to amplifier 24 (*see e.g.*, *Shanley* at Figure 1) and thus does not teach such an adder.

In addition, *Shanley* does not teach the feedback signal recited in amended Claim 11. Claim 11 has been amended in a manner consistent with amended Claim 9. For example, amended Claim 11 recites "a brightness limitation circuit coupled to receive the adjusted color channel reference signal from each color channel control means." As stated above with reference to Claim 9, *Shanley* teaches only a comparator coupled to receive a single color signal. Claim 11 goes on to recite a "brightness feedback signal based on a detection of a signal level of a color channel reference signal having the lowest signal level among the plurality of adjusted color channel reference signals." As discussed above with reference to Claim 9, *Shanley* does not teach an additional minimum signal detector that outputs the signal level of the color channel reference signal having the lowest signal level. As such, none of the cited references, singly or in combination, disclose, teach or suggest all of the limitations of Applicant's Claim 11. Therefore, dependant Claim 11 is believed to be allowable and notice to that affect is respectfully requested.

Claim 12 depends from and further limit amended Claim 11. Claim 12 is therefore allowable for at least the same reasons as that of Claim 11 as well as any additional limitations it recites.

Claims 16-17 and 19-20 now depend from claims that contain similar limitations to that of Claim 11. As such, none of the cited references, singly or in combination, disclose, teach or suggest all of the limitations of amended Claims 16-17 and 19-20. Therefore, amended

Claims 16-17 and 19-20 are believed to be allowable and notice to that affect is respectfully requested.

Claims 2-7 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Sano* in view of *Shanley*, and in further view of *Okada*, U.S. Pat. No. 4,489,349 (hereinafter *Okada*).


Claims 2-7 depend from amended Claim 1. Claims 2-7 are therefore allowable for at least the same reasons as that of Claim 1 as well as any additional limitations they recite.

The Director is authorized to charge any additional fees due by way of this Amendment, or credit any overpayment, to our Deposit Account No. 19-1090.

All of the claims remaining in the application are now clearly allowable. Favorable consideration and a Notice of Allowance are earnestly solicited.

Respectfully submitted,

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